# LIST OF U.S. CUSTOMS LABORATORY METHODS

| USCL NUMBER | METHOD | TITLE |
|---|---|---|
| 32-01 | USCL Manual | Recommended Guidelines for the Analysis of Synthetic Coloring Matter |
| 32-02 | ASTM D 1394 | Test Methods for Chemical Analysis of White Titanium Pigments |
| 32-03 | ASTM D 476 | Specification for Titanium Dioxide Pigments |
| 32-04 | ASTM D 185 | Test Methods for Coarse Particles in Pigments, Pastes and Paints |
| 32-05 | ASTM D 2371 | Test Method for Pigment Content of Solvent-Reducible Paints |
| 32-06 | ASTM D 2372 | Practice for Separation of Vehicle from Solvent-Reducible Paints |
| 32-07 | ASTM D 2621 | Test Method for Infrared Identification of Vehicle Solids from Solvent-Reducible Paints |
| 32-08 | ASTM D 480 | Test Methods for Sampling and Testing of Flaked Aluminum Powders and Pastes |
| 32-09 | ASTM D 962 | Specifications for Aluminum Powder and Paste Pigments for Paints |

| USCL NUMBER | METHOD | TITLE |
| --- | --- | --- |
| 32-10 | ASTM D 5010 | Guide for Testing Print Ink and Related Materials |

# U.S. CUSTOMS LABORATORY METHODS

## USCL Method 32-01 INDEX

# Recommended Guidelines for the Analysis of Synthetic Coloring Matter

**SAFETY PRECAUTION**

*This method does not purport to address all the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

## 1 SCOPE AND FIELD OF APPLICATION

The following list of references contains procedures which should proved useful in the analysis of the products of Chapter 32 HTSUS. This list is being provided for general guidance and should not be considered exhaustive.

## 2 REFERENCES


***Spot Test in Organic Analysis***
F. Feigel and V. Anger
Elsevier, Amsterdam, 1966

***The Systematic Identification of Organic Compounds,*** 6th Edition
R.L. Shriner, R.C. Fuson, D.Y. Curtin, and T.C. Morrill
John Wiley & Sons, New York 1980

***Spectrometric Identification of Organic Compounds,*** 5th Edition
R.M. Silverstein, G.C. Bassler, and T.C. Morrill
John Wiley & Sons, New York, 1991

***Chemical Technicians' Ready Reference Handbook***, 3rd Edition
G.J. Shugar and J.T. Ballinger
McGraw-Hill, New York, 1990

Procedures for Identifying Dyes and Pigments, A. Goetz, in
***Textile Chemist and Colorist***, **1985**, *17(9)*, 171-176.

***The Analytical Chemistry of Synthetic Dyes***
Editor: K. Venkataraman
Wiley-Interscience, New York, 1977

Dyes, K.A. Dellian and R. E. Tellis, in
***Encyclopedia of Industrial Chemical Analysis***
Editors: F.D. Snell and L.S. Ettre
Interscience, New York, 1971
Volume 12, pp 1-22

***Atlas of Polymer and Plastics***

***Analysis***, 2nd Edition
D.O. Hummel and F. Scholl
Hanser, Munich, 1981

***Paint Testing Manual***, 13th Edition
Editor: G.G. Sward
ASTM Special Technical Publication 500
American Society for Testing and Materials, Philadelphia, 1972

***Identification and Analysis of Plastics***, 2nd Edition
J. Haslam, H.A. Willis and D.C.M. Squirrell
Butterworths, London, 1972

***An Infrared Spectroscopy Atlas for the Coatings Industry,***
Editor: D.R. Brezinski
Federation of Societies for Coating Technology, Blue Bell, PA, 1991

Analysis of Paint Vehicles and Related Materials, O.D. Shreve, in ***Handbook of Analytical Chemistry***
Editor: L. Meites
McGraw-Hill, New York, 1963
pp 13-131 to 13-157

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 32-02

Index

# ASTM D 1394
# Test Methods for Chemical Analysis of White Titanium Pigments

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

These methods cover procedures for the chemical analysis of white titanium dioxide pigments provided for in Subheading 3206.10 and Subheading Note 1(b)(ii) of Section XI Textiles and Textile Articles of the Harmonized Tariff Schedules of the United States (HTSUS).

### 2 REFERENCES

***ASTM D 1394***
Test Methods for Chemical Analysis of White Titanium Pigments

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 32-03

Index

# ASTM D 476
# Specification for Titanium Dioxide Pigments

**SAFETY PRECAUTIONS**

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

## 1 SCOPE AND FIELD OF APPLICATION

**1.1** This specification covers four types of titanium dioxide pigments:

**1.1.1** Type I-Anatase, free chalking;

**1.1.2** Type II-Rutile, medium chalk resistant (low);

**1.1.3** Type III-Rutile, medium chalk resistant (high);

**1.1.4** Type IV-Rutile, highly chalk resistant;

provided for in Subheading 3206.10 and Subheading Note 1(b)(ii) of Section XI Textiles and Textile Articles of the Harmonized Tariff Schedule of the United States (HTSUS).

Excluded from this field of application are rutiles provided for in Heading 2614 of the Harmonized Tariff Schedules of the United States (HTSUS).

## 2 REFERENCES

***ASTM D 476***
Specificationh for Titanium Dioxide Pigments

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 32-04

Index

# ASTM D 185
# Test Methods for Coarse Particles in Pigments, Pastes and Paints

**SAFETY PRECAUTIONS**

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

## 1 SCOPE AND FIELD OF APPLICATION

These methods cover the determination of the amount of coarse particles in dry pigments and of coarse particles and skins in mixtures of pigments and vehicles provided for in Chapter 32 of the Harmonized Tariff Schedule of the United States (HTSUS).

This method may also have application in the following areas:

1. Statistical Note 2: For the purposes of Subheading 2601.11.0060, the term "coarse" refers to iron ores with a majority of individual particles having a diameter exceeding 4.75 mm.
2. Particles in Heading 6808.00.00.00 Panels, boards, tiles, blocks and similar articles of vegetable fiber, of straw or of shavings, chips, particles, sawdust or other waste, of wood, agglomerated with cement, plaster or other.
3. Subheading Note 1(c) of Chapter 79 for zinc dust obtained by condensation of zinc vapor, consisting of spherical particles which are finer than zinc powders. At least 80 percent by weight of the particles pass through a sieve with 63 micrometers (microns) mesh. It must contain at least 85 percent by weight of metallic zinc.
Excluded from the field of application are particles in Chapter 44 of the Harmonized Tariff Schedules of the United States (HTSUS).

## 2 REFERENCES

***ASTM D 185***
Test Methods for Coarse Particles in Pigments, Pastes and Paints

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 32-05

Index

# ASTM D 2371
# Test Method for Pigment Content of Solvent-Reducible Paints

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This method covers the procedure for the quantitative separation of the vehicle from the pigment in solvent-reducible coatings provided for in Chapter 32 under Heading 3208 of the Harmonized Tariff Schedule of the United States (HTSUS). Excluded from this field of application are paints dispersed in aqueous media Headings 3209, 3210 and 3211.

This method has been proven to be applicable to the following types of paints: white linseed oil outside house paint, white soya and phthalic alkyd enamel, white linseed o-phthalic alkyd enamel, red lead primer, zinc chromate primer, flat white inside enamel, white epoxy enamel, white vinyl toluene modified alkyd, and white amino modified baking enamel. It is considered to be applicable to most solvent-reducible paints.

### 2 REFERENCES

***ASTM D 2371***
Test Method for Pigment Content of Solvent-Reducible Paints

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 32-06 Index

# ASTM D 2372
# Practice for Separation of Vehicle from Solvent-Reducible Paints

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This method covers the procedure for the separation of the vehicle from the pigment in solvent-reducible paint provided for in Chapter 32, Heading 3208, of the Harmonized Tariff Schedules of the United States (HTSUS). Excluded from this field of application are paints dispersed in aqueous media in Headings 3209, 3210 and 3211.

### 2 REFERENCES

***ASTM D 2372***
Practice for Separation of Vehicle from Solvent-Reducible Paints

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 32-07 Index

# ASTM D 2621
# Test Method for Infrared Identification of Vehicle Solids from Solvent-Reducible Paints

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This test method covers the qualitative characterization or identification of separated paint vehicle solids by infrared spectroscopy within the limitations of infrared spectroscopy provided for in Chapter 32 of the Harmonized Tariff Schedules of the United States (HTSUS).

### 2 REFERENCES

***ASTM D 2621***
Test Method for Infrared Identification of Vehicle Solids from Solvent-Reducible Paints

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 32-08 Index

# ASTM D 480
# Test Methods for Sampling and Testing of Flaked Aluminum Powders and Pastes

**SAFETY PRECAUTIONS**

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

**1 SCOPE AND FIELD OF APPLICATION**

**1.1** These methods cover procedures for sampling, qualitative analysis, and physical testing of flaked aluminum powders and pastes (leafing and nonleafing) for coatings provided for in Subheading 3212.90.00.10 (Metallic aluminum pigments) of the Harmonized Tariff Schedule of the United States (HTSUS).

**1.2** These methods apply equally to leafing and nonleafing flaked aluminum powders and pastes provided for in Subheading 3212.90.00.10 (Metallic aluminum pigments) of the Harmonized Tariff Schedule of the United States (HTSUS) except where noted to the contrary.

**2 REFERENCES**

***ASTM D 480***
Test Methods for Sampling and Testing of Flaked Aluminum Powders and Pastes

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 32-09

Index

# ASTM D 962
# Specifications for Aluminum Powder and Paste Pigments for Paints

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This specification covers four types and three classes of aluminum pigments for use in paints provided for in Subheading 3212.90.00.10 (Metallic aluminum pigments) of the Harmonized Tariff Schedule of the United States (HTSUS).

### 2 REFERENCES

***ASTM D 962***
Specifications for Aluminum Powder and Paste Pigments for Paints

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 32-10

Index

# ASTM D 5010
# Guide for Testing Print Ink and Related Materials

**SAFETY PRECAUTIONS**

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

**1 SCOPE AND FIELD OF APPLICATION**

**1.1** This guide covers a list of test methods, practices, and specifications that can be used for the testing and evaluation of printing inks, printed ink films, and substrates provide for in Heading 3215, "Printing ink, writing or drawing ink and other inks, whether or not concentrated or solid," and paints and varnishes of Chapter 32 of the Harmonized Tariff Schedule of the United States (HTSUS).

**1.2** This guide includes methods that were developed to test paints, paint films, and substrates, but may be adapted for use in testing printing inks and printed matter. Tests on raw materials and analytical methods in general have not been included.

**1.3** For the purpose of this guide, clear coatings such as overprint varnishes are classed as printing inks.

**2 REFERENCES**

***ASTM D 5010***
Guide for Testing Print Ink and Related Materials